XI. Obſervationes Botanicæ, *Plantarum quarundam Deſcriptiones accuratiores exhibentes*; *per D^r* Paulum Henricum Gerhardum Moehring, *M. D. factæ*; *ad Illuſtriſſimum D^n.* Hans Sloane, *Bart.* R. S. *Præſ. miſſæ.*

I.

SALICORNIA *ramis clavatis, ſquamis articulorum adpreſſis.*

PLANTA annua, quoad omnes partes ſucculenta, 8. 9. digit. Rhenan. raro pedem Rhenan. alta.

RADIX e multis fibris filiformibus conſtat.

CAULIS ramoſus, tereti compreſſus parum, ad radicem lignoſus & rugoſus, ſupra ſucculentus, glaber, aphyllus, clavatus: *Clavis* oppoſitis, alterno ordine e productionibus auriculatis, ſquamatis, vaginantibus, arcte adpreſſis, caulis primarii erumpentibus, $\frac{1}{2}$, 1. ad 1 $\frac{1}{2}$ dig. Rhen. longis, ſuprema terminatrice reliquis longiore.

FRUCTIFICATIO e *Floſculis* ternis, figuram trianguli birectanguli ſphærici, cujus baſis ſurſum convexa eſt, repræſentantibus, alterno ordine ſibi oppoſitis, conſtat. His fructificationibus triangularibus omnes clavæ ſecundum longitudinem obſitæ ſunt.

Inſidet cuilibet commiſſuræ ramulorum ſquamato-denticulatæ, ſubacutæ, *denticulo* inſtar receptaculi totius fructificationis ſerviente, ac infima ſtamina occludente.

CALYX eſt productio ſcapi ſquamata, marceſcens quocum unum planum efficit;

Floſ-

Floſculi ſuperioris, & quaſi intermedii, rhomboideus, angulo inferiori rectilineo acuto; Angulo ſuperiori curvilineo obtuſo;

Floſculorum duorum inferiorum, aut, ſi mavis, lateralium, Trigonus, baſi parum latiore.

COROLLA nulla.

STAMINA Duo, ſupra & infra germen oppoſito ſitu, ejuſdem baſi adfixa, & e rimula calycis prominula: Superius primum exſurgit; quo delapſo, inferius prodit (Unde factum eſt, ut omnes Botanici unum modo ſtamen eidem adſcribant).

Filamenta filiformia, intra calycem abſcondita.

Antheræ oblongæ, erectæ, extra calycem hiantes, didymæ, (inde fit, ut primo ſubtiliori adſpectu parvum corpus tetragonum præ ſe ferant) extrorſum concavæ, lateribus introrſum longitudinaliter convolutis, cum filamento æqualis longitudinis, eidem in ſummo utrimque adhærentes, arcteque illud obtegentes, baſi ſua plerumque intra foveolam calycis incluſæ. In concavitatem iſtam multum farinæ genitalis delabitur.

PISTILLUM, *Germen* ſubrotundo-acuminatum, in medio filamentorum ſitum, intra calycem abſconditum, ejuſdem cum filamentis longitudinis.

Stylus nullus. *Stigma* capillare, acutum.

PERICARPIUM *Capſula* veſicaria, inflata, ovato-acuminata, exacte referens calyptram polytrichi DILLENII, ſed deorſum magis ampullatam, intra calycem latens.

SEMEN unicum, ovato-compreſſum, horizontaliter in capſula ſitum, a baſi ad medium ſulcatum, tenuiſſimi ope *pedicelli* coſtæ caulis adfixum.

OBSERVATIONES.

a. Creſcit heic locorum ubique ad oceani Septemtrionalis litus, dummodo terra pinguis, argillacea (noſtratibus *Schlick* vocata) adſit, & magnis fluxibus maris aqua ſalina interdum conſpergi poſſit. Simul ac vero terra aggere circumvallatur, & maris undis ſubtrahitur, ſicque ſalis marini nutrimento privatur, ſequenti ſtatim anno diſparet.

b. Adhibetur inter acetaria, refrigeranti ſapore ſe commendans.

c. Floret *Auguſto*, ſemina perficit *Septembri* & *Octobri.* Plantulæ prodeunt fine *Aprilis*, & initio *Maii:* His cotyledones tereti-oblongæ, ſucculentæ.

d. Ergo pertinet in *Syſtemate Sexuali* LINNÆI ad *Diandriam Monogyniam.*

(*e.*) Alia haut ita pridem ſpecies *Saltzdahlenſis*, *Ducatus* ſcilicet *Brunſvicenſis*, nobis, ſiccis ſpecieminibus, miſſa eſt a D. D. FRANC. ERN. BRUCKMANNO, quæ longe diverſa a noſtra, adpellari poſſet *Salicornia, ramis imbricatim pyxidatis, ſquamis articulorum exſtantibus*, propoſitaque a variis auctoribus videtur.

(*f.*) Tandem, genus *Salicorniæ* a nullo hactenus Botanico curate ſatis enodatum fuiſſe patet, teſte fragmento amiciſſimi LINNÆI *Charact. Gener. Plantar. & Hort. Cliffort.* ſua enarrantis ex incompletis TOURNEFORTII ac MAGNOLII adumbrationibus.

II.

VERBASCUM *foliis cordatis crenatis acutis glabris: floralibus ternis.*

PLANTA biennis, ſecundo anno florens, caule 7, 8, pedes alto.

CAULIS

CAULIS plerumque ſimplex, nonnumquam inferne ramoſus, longiſſimus, erectus, teres, breviſſimis pilis villoſus, læte viridis, inferius valde folioſus, ſuperius ab initio florum emergentium parvis foliolis ſtipatus.

FOLIA *primi anni* & *Caulis inferiora* ſeſſilia, ſemiamplexicaulia, cordata, in acumen lanceolato-lineare acutum terminata, mollia, glabra, margine crenato, dentato: denticulis inæqualibus.

Floralia terna, lanceolato-linearia, acuta, parva, medio infimo duplo triplove longiori.

FLORES plerumque quaterni ex eodem ſinu: in ſummo caulis unicus, reliquis ſuffocatis.

PEDUNCULUS breviſſimus, calyce triplo fere brevior, craſſus, ſimplex.

CALYX. *Perianthium*, ut in *Linn. gen. pl.* ad baſin fere quinquepartitum: *laciniis* lanceolato-linearibus, hirſutis.

COROLLA. *Petalum*, ut *Linn. gen.* 153.

STAMINA. *Filamenta* 5. ſubulata, corolla breviore: *tribus ſuperioribus* reliquis brevioribus, circumcirca lanuginoſis: *duobus infimis* reliquis tertiam partem longioribus, declinatis, ſurſum incurvatis, in medio interni lateris lanuginoſis.

Antheræ trium breviorum filamentorum triangulariter incumbentes, adpreſſæ, planæ, ſexangulares: *duorum longiorum* filamentorum rectanguli figura incumbentes, adpreſſæ, planæ, ſexangulares.

PISTILLUM *Germen* ſubrotundum. *Stylus* filiformis, inclinatus, ſtaminibus parum longior, marceſcens. *Stigma*, ut *Linn. gen.*

PERICARPIUM *Capſula* ſubgloboſa, tranſverſim a ſummo ad baſin biſulcata, bilocularis, *&c.* ut *Linn. gen.*

In-

Involucrum hujus exterius eſt calyx erectus, fructum amplectens.

SEMINA Numeroſa, oblongo-quadrangularia, truncata, minutiſſime rugoſa, parva. *Receptacula*, ut *Linn. gen.*

Obſ. *a.* Ergo quoad plurimas fructificationis partes ſimillimum exſiſtit Verbaſco quinto LINN. *Hort. Cliff. p.* 55. in reliquis differt.

b. Corollarum color flavus, unguibus maculatis, purpureis: filamenta interne purpurea: horum lanugo partim purpurea, partim alba.

c. Semina vere 1738. ab optumo LINNÆO titulo *Verbaſci e Virginia* miſſa, cum plurimis aliis noviter ex *America* advectis, atque ad Illuſtr. Dom. GE. CLIFFORD tranſmiſſis, plantas modo deſcriptas largita ſunt, quæ hyeme ſolo ſub tecto conſervandæ apud nos videntur.

(*d.*) Flos tota æſtate matutinis horis apertus.

e. Ergo Verbaſcum annuum, foliis oblongis ſinuatis obtuſis glabris. LINN. *Hort. Cliff.* 55. melius circumſcribetur hoc nomine: VERBASCUM *foliis oblongis ſinuato-crenatis obtuſis glabris, florali unico.* Cujus differentia ſpecifica potiſſimum in his conſiſtit: *Folium florale* ovato-acuminatum, unicum. *Flos* unicus. *Pedunculus* longiſſimus, filiformis, calyce triplo longior. *Calyx* ſub fructu plano-expanſus.

III.

SENECIO *foliis pinnatifidis lacinulatis: laciniis omnibus laxis patentiſſimis linearibus acutis.*

Jacobæa altiſſima, foliis erucæ artemiſiæve ſimilibus & æmulis. Rupp. Jen. 142.

Caulis humanæ altitudinis, teres, leviſſime anguloſus, ſtrigoſus, glaber.

Folia alterna pinnatifida, glabra, laciniis æqualibus, linearibus, patentiſſimis, laxe lacinulatis, apicibus acutis, rachi lineari : color ſaturate viridis, inferiori parte parum pallidior.

Corollæ radii flavi, magni, mox revoluti.

Calycis in baſi foliola reliquis adpreſſa.

Obſ. *a.* Dixi hanc plantam, Jena miſſam, Senecionem, ſecundum characterem, a LINN. *gen. plant.* 647. datum.

b. Ergo ſpecie diverſa a LINNÆI Senecione foliis pinnato lyratis, lacinulatis. *Hort. Cliff.* 406.

IV.

ILLECEBRUM *Linn. Corollar. gen.* 947. *Rupp. Jen.* 79. Corrigiola *Dillen. Giſſ. Supplem. adpend.* 167.

CALYX *Perianthium* pentaphyllum, carnoſum, *foliolis* craſſis, erectis, compreſſis, introrſum ad ſummum fere excavatis, perſiſtentibus, ſeta infirma terminatis.

COROLLA. Nulla.

STAMINA. *Filamenta* quinque triangulari-ſubulata, fructu breviora, intra calycem. *Antheræ* rotundulæ, erectæ, ſimplices.

PISTILLUM. *Germen* ovato-acutum, calyce dimidio fere brevius. *Stylus* nullus. *Stigma* ſimplex, turgidum, obtuſum.

PERICARPIUM. *Capſula* membranacea, tenuiſſima, ovata, utrimque acuminata, ſimplex, univalvis, ſuperne dehiſcens, calyce tecta.

SEMEN. Unicum, ovatum, utrimque acutum, maxumum, nitidum.

Obſ.

Obſ. *a.* Ergo pertinet in *Syſtem. Sexual.* LINNÆI ad *Pentandriam Monogyniam*, commodeque poſt *genus* 94. *Achyranthis* collocabitur.

b. Obſervatio tribus annis repetita hæc docuit, quum plantula humifuſa copioſe apud nos in arenoſis humidis proveniat.

V.

RUPPIA *foliis linearibus obtuſis.*

PLANTA aquis marinis innatans, flexuoſa, perennis.

RADIX ramoſa, faſciculos foliorum emittens; *corpus* teres, geniculatum, repens, brunnum, ſolidum, craſſitie pennæ circiter columbinæ, aut parum tenuius; *fibrillæ* capillares ſimplices, e geniculis tantum prodeuntes, unciam unam alteramve longæ, albicantes.

Faſciculi caulini, culmi graminei ſpecie, ſinguli e ſingulis radicalibus ramulis prodeunt, compreſſi, laxe geniculati, glabri, valde infirmi, flexiles, natantes, aquave marina refluente, argillæ incumbentes, e quolibet geniculo vaginato, alterno ordine, ramos compoſitos emittentes.

Folia vaginantia, alterna, linearia, verticaliter obtuſa, oblonge parallelogramma, glabra, mucoſa, ſaturate viridia, baſi geniculis caulinis infixa, ramulos cum horum foliis, narciſſorum inſtar, includunt. Verſus extremitatem cujuſlibet ramuli 2, 3, 4 folia, ſitu parallelo, unicæ vaginæ includuntur.

Foliis vaginatis omnibus fere, ipſo caule longioribus, *fructificationes* ea quidem lege inſunt, ut hæ in dimidia inferiori ejus parte intra rimulam compreſſam abſcondantur. Supra & infra fructificationis

lineam geniculum tranſverſe ſulcatum eſt, hanc a petiolo infra, & a reliquo folio ſupra diſtinguens.

CALYX, *Involucrum univerſale, vagina ſpathæ* vices ſupplens, in dimidia inferiori folii parte, introrſum rima media longitudinali, cujus latus unum ab altero aliquantum obtegitur, hians.

Spadix intra involucrum, membranaceus, albidus, compreſſus, obtuſus, lateribus longitudinaliter parum convolutis, medio leviter carinato, dorſum involucri ſpectans, longitudine $\frac{3}{4}$ involucri, aut parum longior, numquam hujus finem adtingens, fructificationes 9. ad 13. diſtice in longitudine obliqua fovens.

COROLLA Nulla.

Filamenta nulla. *Antheræ* ſolitariæ, ante floreſcentiam intra involucrum latentes, ovato-oblongæ, utrimque ſubacutæ, oblique adſcendentes & diſtice ſecundum longitudinem ſpadici ita adhærentes, ut nunc unam, nunc duas antheras unicum piſtillum eodem in plano excipere videatur, ſingulis tamen antheris ſingula piſtilla vere adſint, modo abſcondita, modoque viſui obvia. At explicatæ, (*i. e.* durante floreſcentia) ab alis ſuis lateralibus, elaſticis, membranaceis, pellucidis, expanſis in figuram naviculæ concavam incurvantur, carina deorſum prominente, & piſtillis ita ſuperimponuntur, ut diſtracta utrimque, patulaque facta involucri rima, ima ſui parte ſurſum horizontaliter adſcendant, atque navicularum concavarum ſpecie ſecundum longitudinem extrorſum pateant. Corpus antherarum flavum & mucoſum eſt, quod facile abſtergi poteſt.

PISTILLUM *Germen* intra involucrum, oblongum, ad baſin, qua ſpadici adfigitur, parum amplius. *Stylus* intra involucrum, ſimplex, filiformis, ſurſum recurvus, per-

perſiſtens, poſt floreſcentiam cum ſpadice parallelus, & parum curvus. *Stigmata* duo, tenuiſſima, capillaria, ab invicem diducta, extra involucrum horizontaliter exporrecta, cito marceſcentia & evanida (ut relicta hinc macula e ferrugineo-nigricans facile alicui imponere poſſit, ſtigma modo unicum eſſe).

PERICARPIUM; *Cortex* tenuis, membranaceus, cylindraceus, baſi obtuſus, apice ſtylo munitus, ſtylo parum longior, cum ſpadice parallelus, baſi liber; ad finem ſtyli ſpadici adfixus, pedicelli ope breviſſimi.

SEMEN In quolibet cortice ſolitarium, cylindraceum, utrimque obtuſum, longitudinaliter ſubtiliſſime ſtriatum, album.

Ergo pertinet in LINNÆI *Syſtem. Sexual.* ad *Gynandriam Monandriam*, minime vero ad Gynandriam Polyandriam ejuſd. *ibid.* In *fragment. meth. nat.* LINN. *p.* 506. *Claſſium plantar.* ad *ordinem* XLVIII. quo & *Naias*, & *Zannichellia* referendæ videntur: In ROYENI *Syſtem.* ad *Palmas*, *Spatha bifida.* Vid. *Ejuſd. Flor. Leyd. Prodr. p.* 9.

Creſcit in aqua marina ad inſulam *Wangeroogenſem*, & reliquas ad ſinum illum Oceani Septemtrionalis, *Wadt* dictum, ſitas inſulas. Durante aquarum adfluxu, eidem innatat; refluxo autem mari, argillæ tenaci, cui radix infigitur, incumbit.

Mirum, plantam adeo vulgarem locis maritimis, cujus folia (quæ ſicca, papyri inſtar, alba, nigra, etiam evadunt) menſibus Auguſto & Septembri a maris fluctibus ad littora abundanti copia rejiciuntur, a nullo, quantum memini, niſi forte Anglo botanico, deſcriptam aut depictam eſſe. Ruppiæ generi inſerenda videtur, ſi hujus character, amiciſſimo LINNÆO non niſi ad ſiccum exemplar, ut ſignum †, in *generibus*

bus plantar. adjectum docet, examinatus, parum ampliatur. An malint alii novum genus?

VI.

HIPPURIS. *Linn. gen.* 1.

Calyx, Nullus.

Corolla, Nulla.

Stamen, Filamentum unicum, ſubulatum, craſſiuſculum, deciduum, longitudine fere antherarum, germini inſidens. *Anthera* didyma, quolibet ſegmento a tergo biſulcata, germine & filamento parum longior, craſſa, carnoſa.

Piſtillum, Germen oblongum, infra ſtamen. *Stylus* unicus, filiformis, tenuis, erectus, acumine extrorſum reflexus, introrſum ad latus ſtaminis ex apice germinis oriundus, ſtamine longior, marceſcens. *Stigma* acutiſſimum.

Pericarpium Nullum.

Semen Unicum, oblongum, nudum, duriuſculo tegmine abſcondens nucleum parvum.

Obſ. 1. Floret Jun. & Jul. fructum perficit Auguſt. Septembr. creſcit abunde in foſſis *Jeveranis*, prope *Embdam Friſiæ Orientalis*, &c.

2. Variat *ſtaminibus rubellis*, quæ copioſior; & aliis locis *ſtaminibus albidis*, herbaceis, quæ rarior.

3. Ergo margines illi, a LINNÆO *gen.* 1. ſub calyce deſcripti, ſunt veræ antheræ, nec aliud quidquam bona lente detegendum.

Vide TAB. I. Fig. *A. B. C.*

FIGURARUM, ſub lente Muſſchenbrœckiana a me delineatarum, explicatio.

Fig. A. *Flos antice viſus, ut filamentum adpareat.*
a. Filamentum.
b. b. Antheræ, antice viſæ.

Fig. B. *Flos a tergo pictus, ut piſtillum conſpiciatur.*
c. c. Antheræ, poſtice viſæ, ut ſulci in conſpectum prodeant.
d. d. Germen.
e. Stylus cum ſtigmate.

Fig. C. *Semen.*
f. Semen fere maturum.
g. Stylus marceſcens, ſupra ſemen reflexus.

XII. *Obſervatio* Anthelii Vitembergæ *ſpectati*; *per* J. Fried. Weidlerum *Matheſ. Prof. ibidem Primar. &* R. S. Lond. *Soc. communicata, in Epiſtola ad* C. Mortimerum, R. S. *Secr.*

DIE $\frac{18}{7}$ *Januarii* A. 1738. quidam ex auditoribus meis, cum ante meridiem in campo prope *Vitembergam* agros dimetiretur, forte fortuna Anthelium, ſive Solis imaginem e regione Solis veri verſus ſeptentrionem poſitam conſpexit. Nimirum mane hora 8, cœlum undique ſerenum, mox circa horam 9, e ſeptentrionali plaga, nubes exoriuntur, ibique ſenſim

Philosoph. Transact. N.° 454. TAB. I.

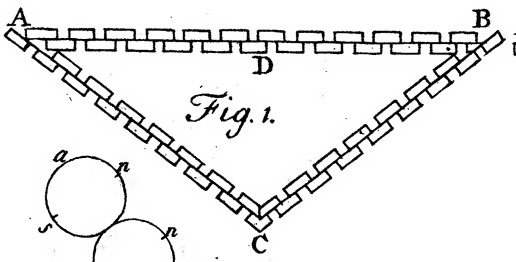


Fig. 1.

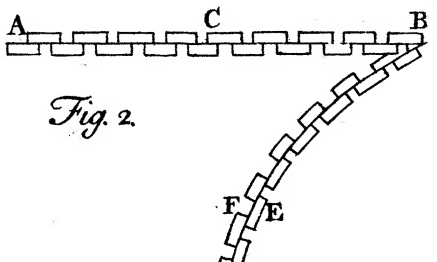
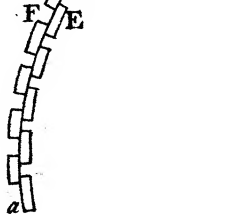


Fig. 2.



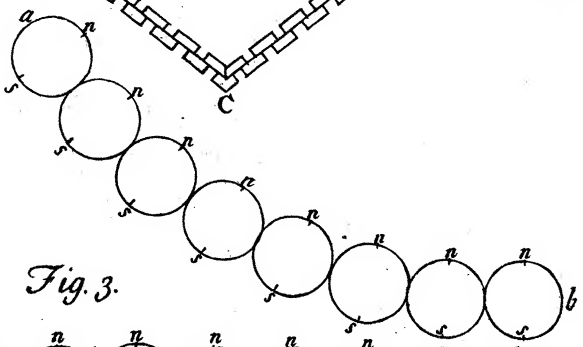
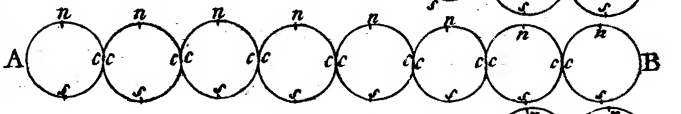
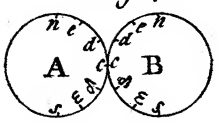


Fig. 3.





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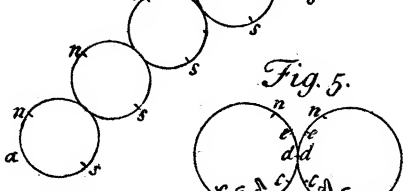
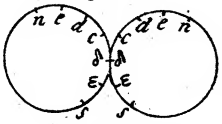


Fig. 5.



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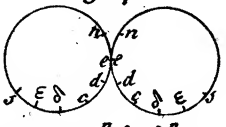


Fig. 7.

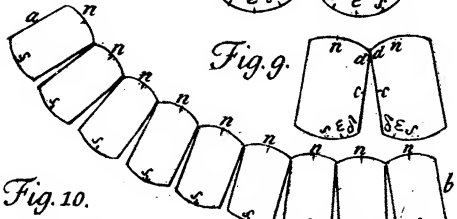


Fig. 10.

Fig. 9.

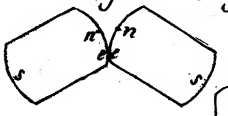
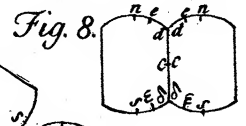


Fig. 11.



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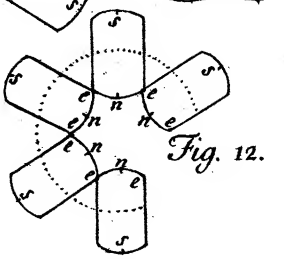
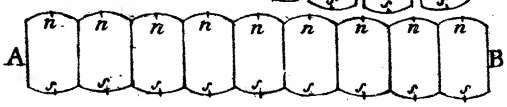


Fig. 12.



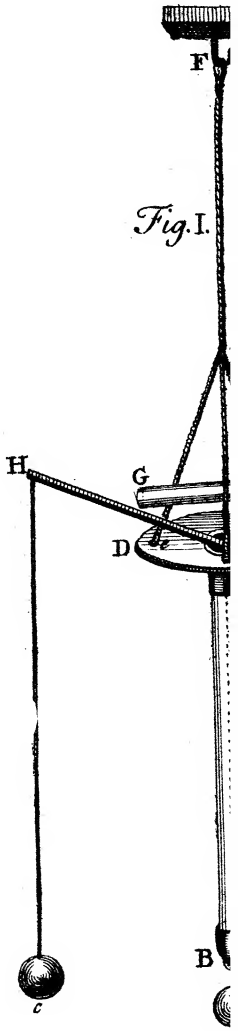


Fig. I.

Fig. B

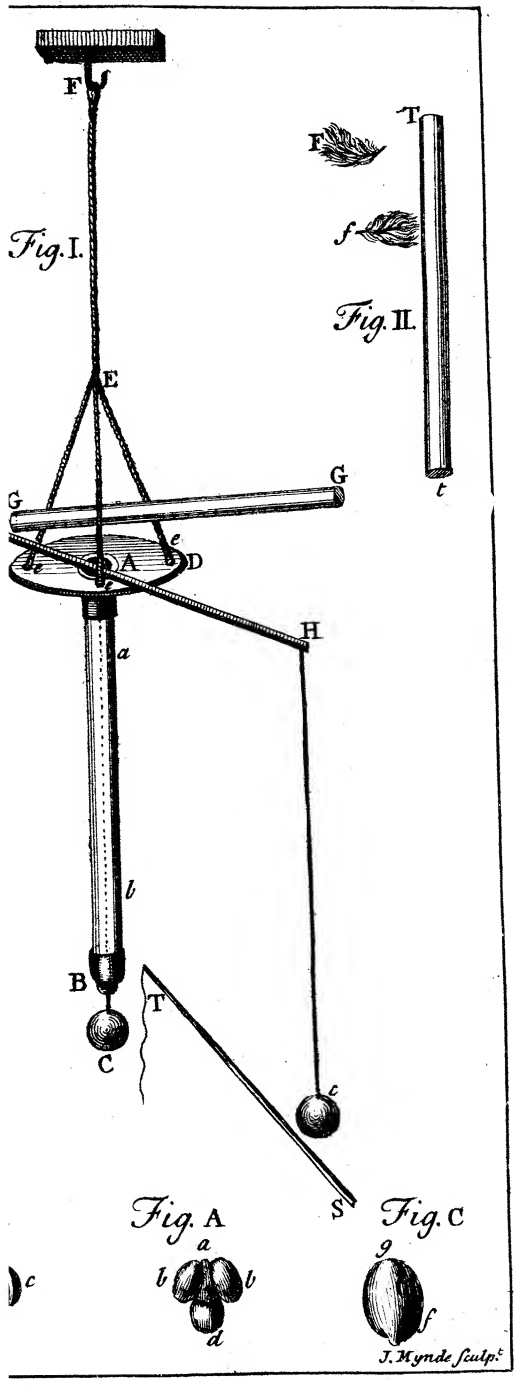

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Fig. I.
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Fig. II.
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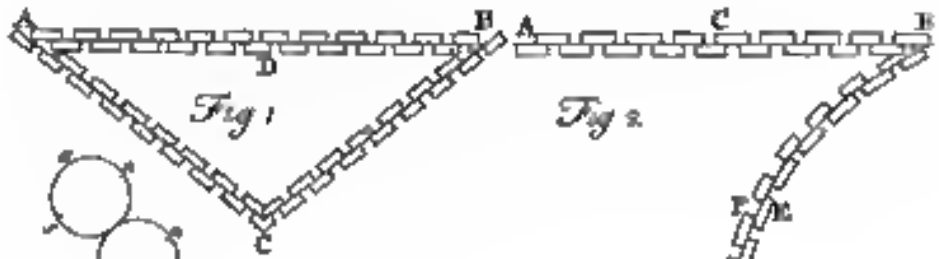

Fig. 1

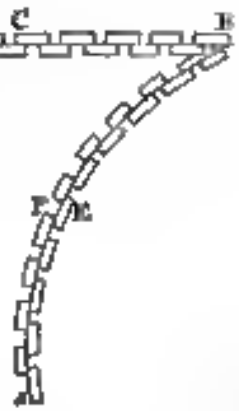

Fig. 2

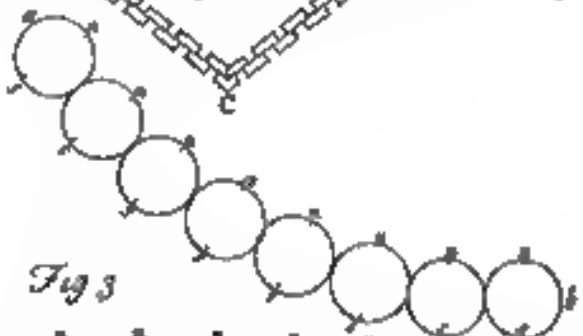

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 11.

Fig. 8.

Fig. 9

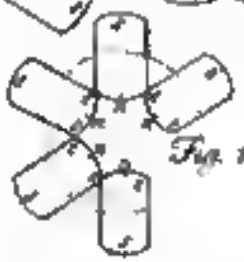

Fig. 12.

Fig. 10

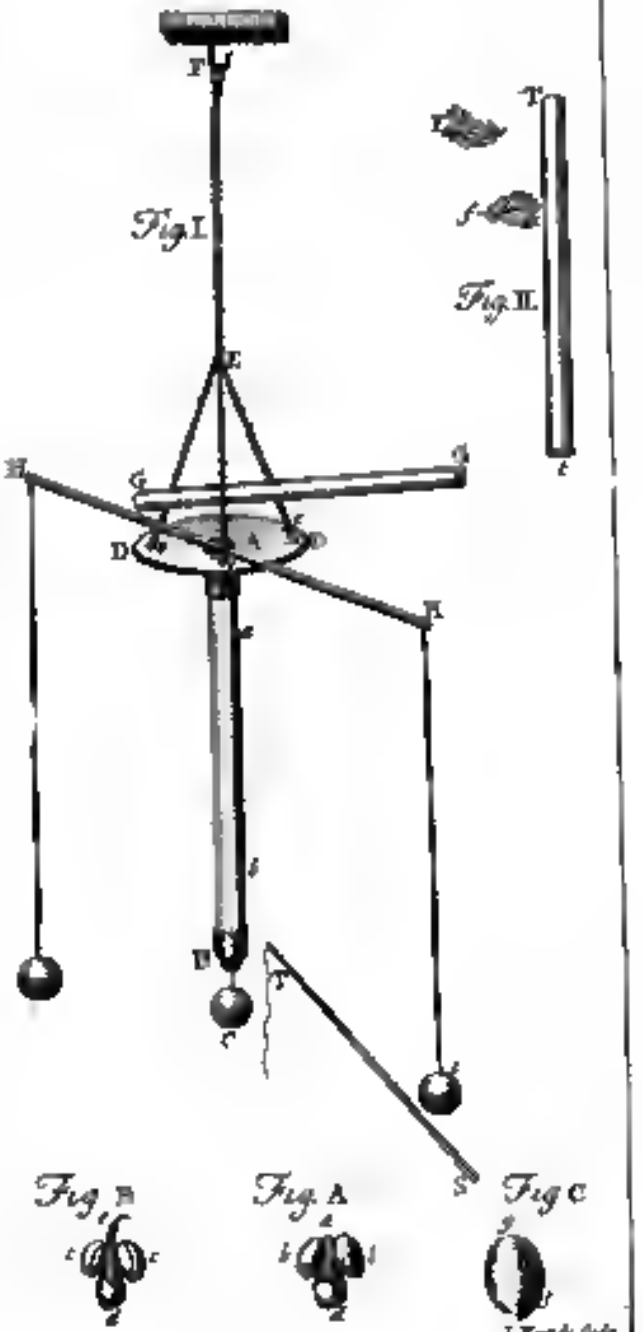

Fig. I.

Fig. II.

Fig. B

Fig. A

Fig. C